<u>REMARKS</u>

By the present response, Applicant has amended claims 1, 2, 5, 10 and 18 to further clarify the invention. Claims 1-28 are pending in this application.

In the Office Action, claims 1, 3-4, 15-17 and 28 have been rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,788,737 (Miyoshi et al.). Claims 6, 8-14, 19-20 and 22-27 have been rejected under 35 U.S.C. § 102(e) (sic) as being anticipated by Miyoshi et al. in view of U.S. Patent No. 6,907,049 (Tamura). Claims 2, 5, 7 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

<u>Allowable Subject Matter</u>

Applicant thanks the Examiner for indicating that claims 2, 5, 7 and 18 would be allowable if rewritten independent form including all of the limitation of the base claim and any intervening claims.

<u>35 U.S.C § 102 Rejections</u>

Claims 1, 3, 4, 15-17 and 28 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Miyoshi et al. Applicant respectfully traverses these rejections.

Miyoshi et al. discloses a PL demodulation section that demodulates pilot signals of a received signal. SIR detection section detects the reception quality of the demodulated pilot signals. Fd detection section detects a Doppler frequency using the demodulated pilot signals.

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Requested modulation method deciding section decides a modulation method to be requested to

the base station using the reception quality of pilot signals and the detected Doppler frequency.

Command generation section generates a command corresponding to the decided modulation

method. Adaptive demodulation section performs demodulation processing on the received

signal using the demodulation method corresponding to the modulation method decided by

requested modulation method deciding section.

Regarding claims 1 and 15, Applicant submits that Miyoshi et al. does not disclose or

suggest the limitations in the combination of each of these claims. For example, the Examiner

asserts that Miyoshi et al. discloses comparing a synchronization detection threshold value set for

each section of a time period in which a quality of a pilot is measured, at col. 3, lines 52-53, col.

4, lines 20-25, col. 5, lines 51-54 and col. 1, lines 37-51. However, these portions merely disclose

that a Doppler frequency of fading (fd) detects fd (Doppler frequency) using the pilot signals

demodulated by a PL demodulation section, that a fd calculation section detects the Doppler

frequency using the time difference information between the first pilot signal and a second pilot

signal (PL1, PL2), that a modulation method is decided using thresholds provided according to

fd, e.g., provides threshold 1 and threshold 2 for a high fd and low fd, respectively, and that

when the SIR of the pilot section is between threshold 1 and threshold 2 or higher than

threshold 2, the reception quality of the data section can satisfy the desired BER. This is not

comparing synchronization detection threshold value set for each section of a time period in

which a quality of a pilot is measured, as recited in the claims of the present application. These

portions merely relate to <u>deciding a modulation method</u> using the reception quality of pilot

signals and a detected Doppler frequency. These portions do not disclose or suggest anything

related to a detection threshold value <u>being set for each section of a time period in which quality</u>

<u>of a pilot is measured</u>, or comparing the synchronization detection threshold values.

The Examiner further asserts that Miyoshi et al. discloses a pilot bit error rate calculated

for each section, at col. 5 lines 31-40. However, these portions merely disclose that figure 7

shows a method of deciding a modulation method where a relationship between the reception

quality of pilot signals and the quality of received data in cases of a high fd and a low fd are

shown. This is not a pilot bit error rate calculated <u>for each section of a time period in which a</u>

<u>quality of a pilot is measured</u>, as recited in the claims of the present application. These portions

merely relate to <u>a Doppler frequency of fading (fd) threshold and a resulted bit error rate</u>

<u>depending on the threshold and the type of system (e.g., QPSK, QAM, etc.)</u>. Further, the cited

portions of Miyoshi et al. do not disclose or suggest judging synchronization detection by a

result of the comparing.

Moreover, the cited portions of Miyoshi et al. do not disclose or suggest logic configured

to compare a synchronization detection threshold value set for each section of a time period,

wherein a pilot bit error rate is calculated for each section, or logic configured to determine a

synchronization detection for each section based on a result of the comparison, as recited in the

claims of the present application.

Regarding claims 3, 4, 16, 17 and 28, Applicant submits that these claims are dependent on one of independent claims 1 and 15 and, therefore, are patentable at least for the same reasons noted previously regarding these independent claims.

Accordingly, Applicant submits that Miyoshi et al. does not disclose suggest or render obvious the limitations in the combination of each of claims 1, 3, 4, 15-17 and 28 of the present application. Applicant respectfully requests that these rejections be withdrawn and that these claims be allowed.

35 U.S.C. § 103 Rejections

Claims 6, 8-14, 19, 20 and 22-27 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Miyoshi et al. in view of Tamura. Applicant respectfully traverses these rejections.

Tamura discloses a radio communication apparatus which is used in a CDMA communication system, has a plurality of fingers, and performs rake reception, includes a delay profile calculating section and a finger path allocating section. The delay profile calculating section calculates a delay profile using a reception signal. The finger path allocating section allocates the positions to the plurality of fingers on the basis of the delay profile calculated by the delay profile calculating section. A delay profile calculation cycle in the delay profile calculating section is variable.

Regarding claim 6, Applicant submits that none of the cited references, taken alone or in any proper combination, disclose suggest or render obvious the limitations in the combination of this claim of, *inter alia*, judging the uplink as in synchronization status if the first pilot BER is smaller than the first synchronization detection threshold value. The Examiner asserts that Miyoshi et al. discloses these limitations at col. 3 lines 59-60. However, these portions merely disclose that a modulation method is decided based on the reception quality of the pilot signals detected by SIR detection section and the fd detected by fd detection section. This is not judging the uplink is in synchronization status if the first pilot BER is smaller than the first synchronization detection threshold value, as recited in the claims of the present application.

Further, the Examiner asserts that Miyoshi et al. discloses calculating a second pilot BER of the uplink for a second section if the first pilot BER is not smaller than the first synchronization detection threshold value, at col. 4 lines 20-25. However, these portions merely disclose, as noted previously, the calculation section detecting a Doppler frequency using a time difference information between a first pilot signal and a second pilot signal. This has nothing to do with a first BER not being smaller than a first synchronization detection threshold value.

Further, the Examiner asserts that Miyoshi et al. discloses comparing the second pilot BER calculated for the second section with a second synchronization detection threshold value set for the second detection, at col. 1, lines 37-51. However, as noted previously, these portions of Miyoshi et al. do not disclose or suggest these limitations in the claims of the present

application.

Regarding claims 8-14, 19, 20 22-27, Applicant submits that these claims are dependent

on one or independent claims 6 and 15 and, therefore, are patentable at least for the same

reasons noted previously regarding these independent claims.

Accordingly, Applicant submits that none of the cited references, taken alone or in any

proper combination, disclose suggest or render obvious the limitations in the combination of

each of claims 6, 8-14, 19, 20 and 22-27 of the present application. Applicant respectfully

requests that these rejections be withdrawn and that these claims be allowed.

CONCLUSION

In view of the foregoing amendments and remarks, Applicant submits that claims 1-18 are now in condition for allowance. Accordingly, early allowance of such claims is respectfully requested. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, Frederick D. Bailey, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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